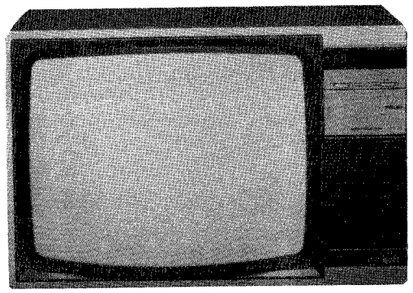
Colour television 26 CS 3270

00Z/01Z/02Z/10Z/42Z

Service
Service
Service

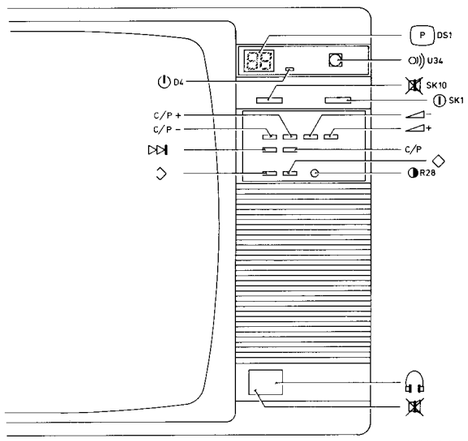


28 822A

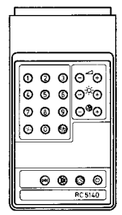
Service Manual

CHASSIS K 35

REPAIR METHOD:
"DIGITAL CONTROLS TRDIV"
CIRCUIT DESCRIPTION:
"DIGITAL CONTROLS TRDIV"
+
FOR /42Z: 22AV1015/00/02
22AV1016/00/02



28 223 B12.



RC 5140

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220 V~/120 W

75 Ω coax.

A66-540X

5 W

8-600 Ω

⩾ 47 kΩ/1 V

6.3mm

180°

a x b x c
762x508x455 mm

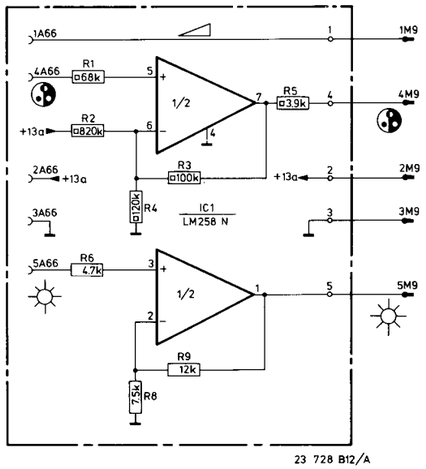
V334LO/U324LO
VHFa : 47 - 88 MHz
b : 162 - 230 MHz
UHF : 470 - 862 MHz

V317LO/U324LO
VHFa : 47 - 111 MHz
b : 111 - 293 MHz
UHF : 470 - 862 MHz

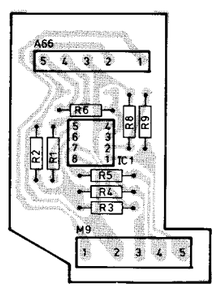
ONLY FOR /42Z

U47 CONTROL ADAPTATION PANEL 4822 212 21192

LM 258 N	4822 209 80866



23 728 B12/A



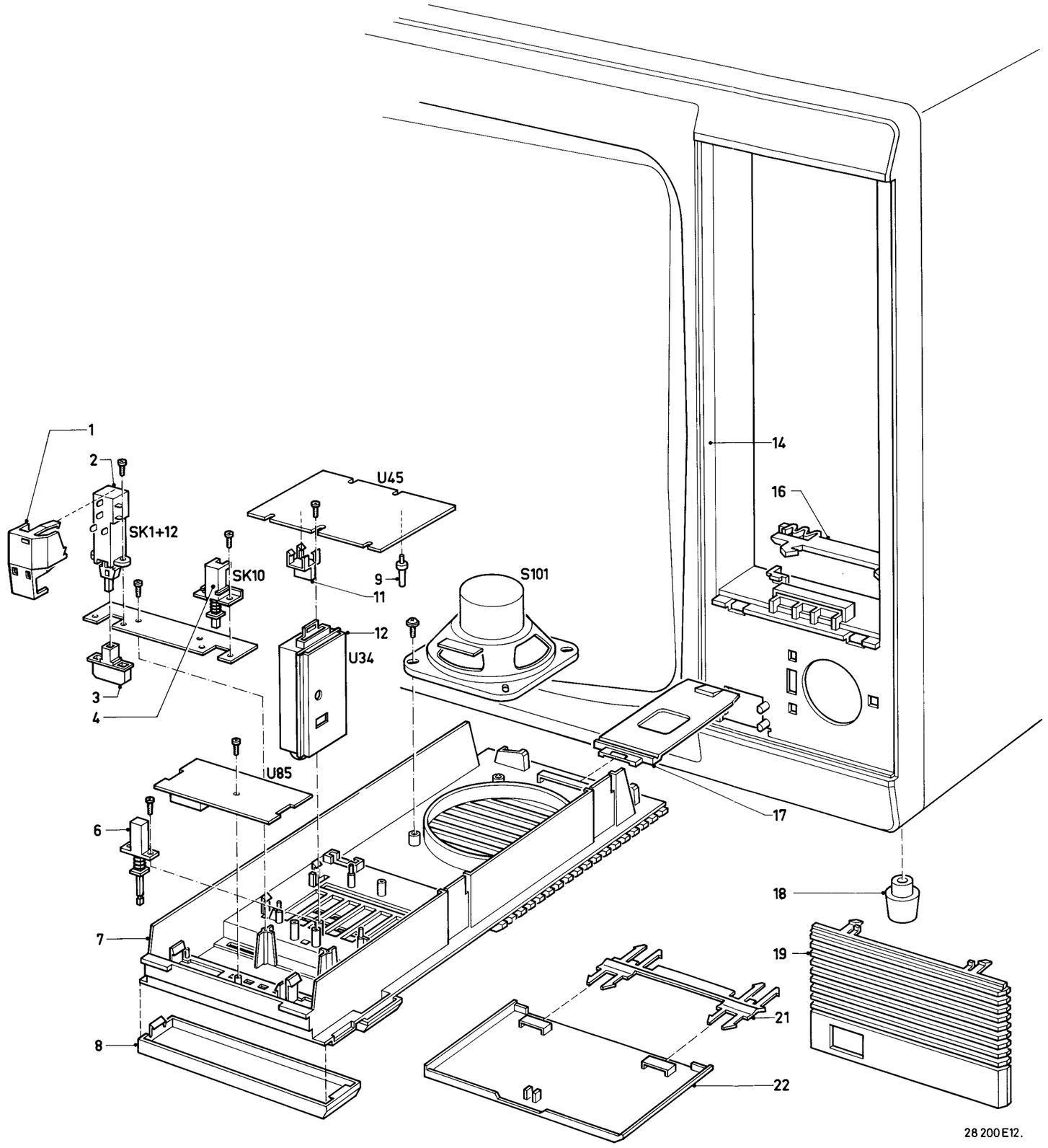
24036A20

THE CONTROL ADAPTATION PANEL IS PLACED BETWEEN SOCKET AND PLUG M9

DocumentationTechnique Service Dokumentation Documentazione di Servizio Huolte-Ohje Manual de Servicio Manual de Serviço

Subject to modification
4822 727 13974
Printed in The Netherlands

PHILIPS



Pos.	Code number	Description	Version
1	4822 432 10224	Safety cover	
2	4822 276 10718	Mains switch	
3	4822 413 31012	Knob	
4	4822 277 10614	Speech/music switch	
6	4822 276 10936	Locking	
7	4822 459 60554	Front panel	/00Z/01Z/10Z
7	4822 459 60613	Front panel	/02Z/42Z
8	4822 432 90972	Cover for display	
9	4822 413 31011	Contrast knob	
11	4822 410 22631	Knob (black)	
11	4822 410 22632	Knob (red)	
12	4822 212 20753	IR receiver	
14	4822 451 80645	Mask	/00Z/01Z/10Z
14	4822 451 80659	Mask	/02Z/42Z
16	4822 417 50144	Lock	
17	4822 417 50143	Hinge	
18	4822 462 10119	Table protectors	
19	4822 458 20088	Grille	/00Z/01Z/10Z
19	4822 458 30298	Grille	/02Z/42Z
21	4822 417 10704	Hinge	
22	4822 432 90973	Cover	/00Z/01Z/10Z
22	4822 432 91042	Cover	/02Z/42Z
31	4822 150 10122	Degaussing coil	
32	4822 150 10122	Deflection unit	
33	4822 404 30235	Clip	
34	4822 691 10135	Support	
36	4822 462 10119	Table protectors	
37	4822 432 90974	Cover for U41	/00Z/01Z/10Z
37	4822 432 91043	Cover for U41	/02Z/42Z
38	4822 404 30236	Clamp	
39	4822 404 30423	Block	
41	4822 401 10642	Strip	
43	4822 404 30424	Block U42	
44	4822 404 30457	Clip fix	
46	4822 464 70168	Frame	
47	4822 404 30456	Bracket fix U42	
48	4822 267 40201	5 pole DIN socket (180°)	
49	4822 438 40049	Rear panel	
51	4822 432 30088	Case	
52	4822 404 30381	Hook	

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

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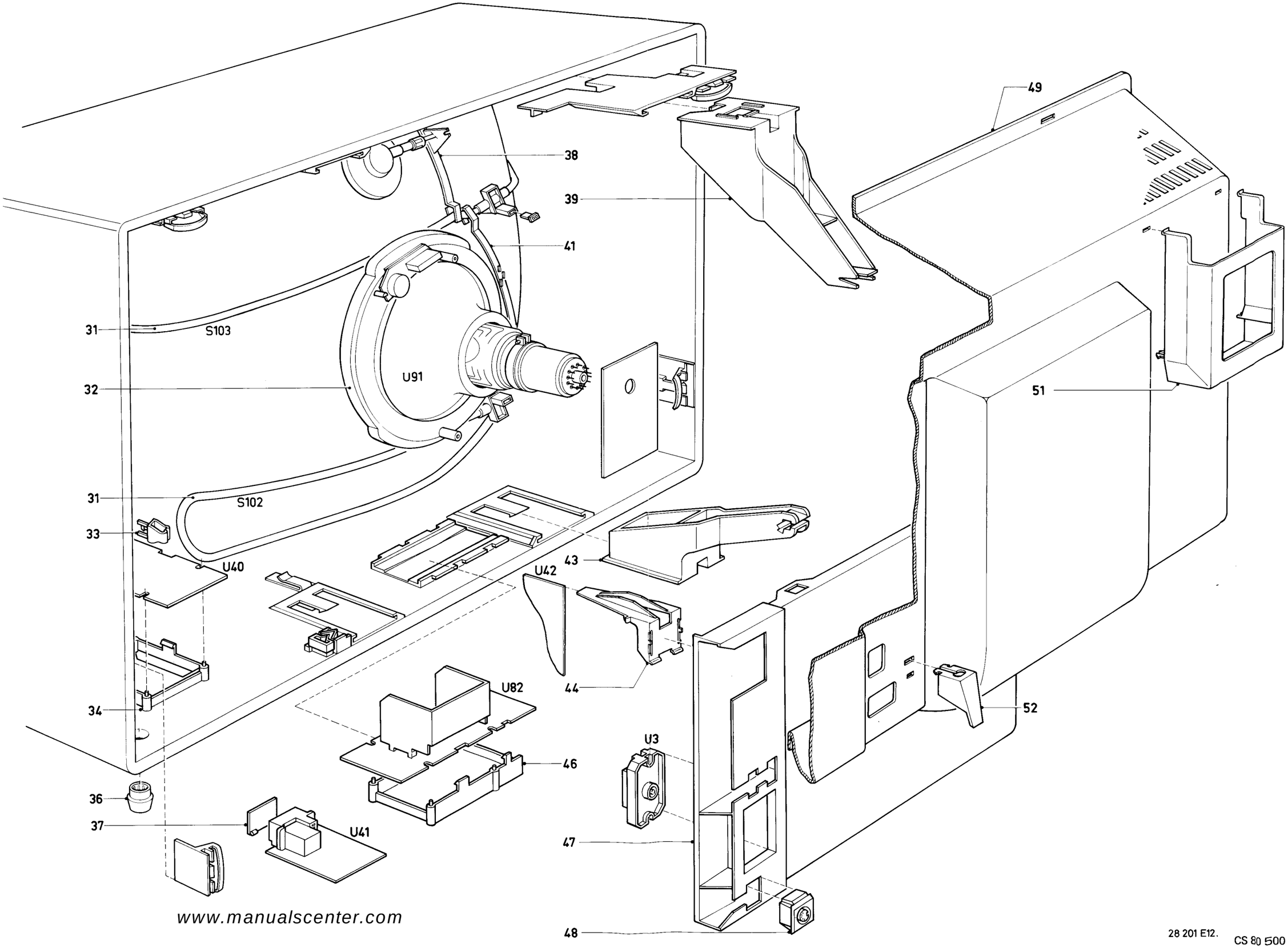

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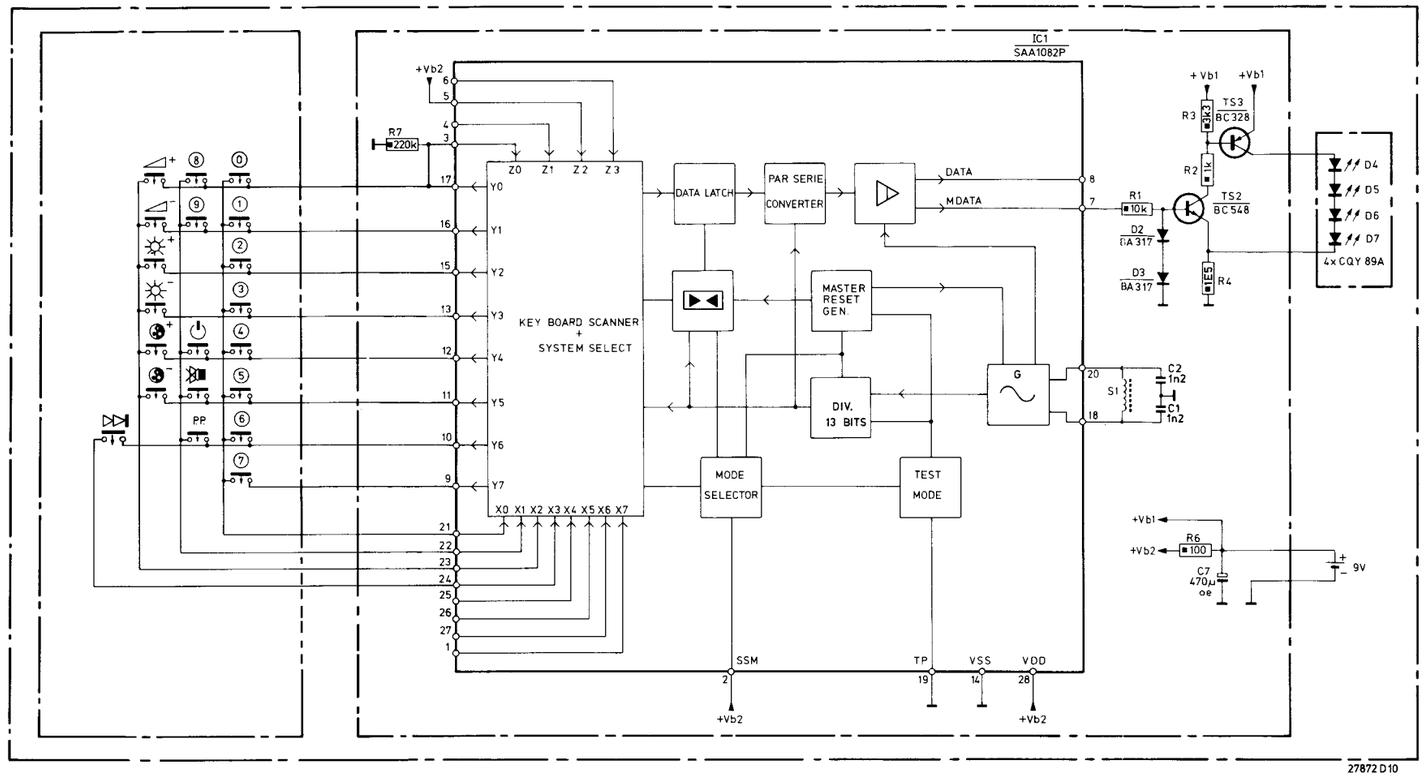
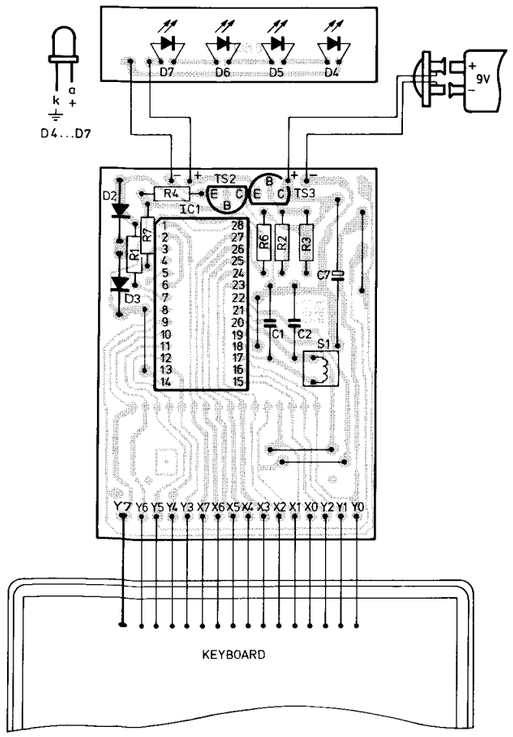
INFRA RED REMOTE CONTROL RC5140



27872 D10

IC1	SAA1082P	4822 209 80613
BC328 BC548		4822 130 44104 4822 130 40938
BA317		4822 130 30847
LD271		4822 130 30969
C1 C2	1.2 nF 1.2 nF	4822 121 50439 4822 121 50439
S1		4822 156 10502



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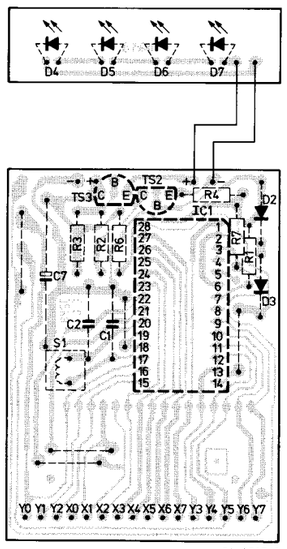

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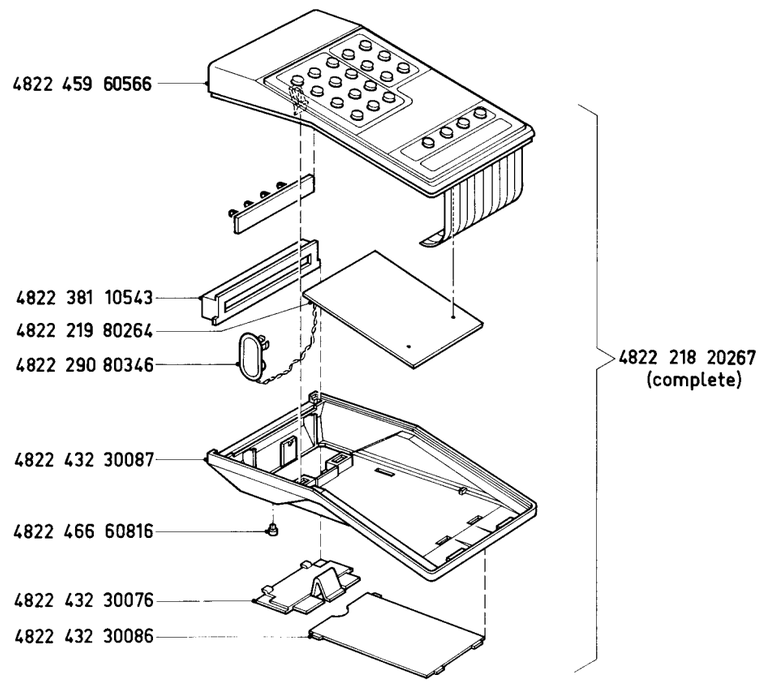

27873C10

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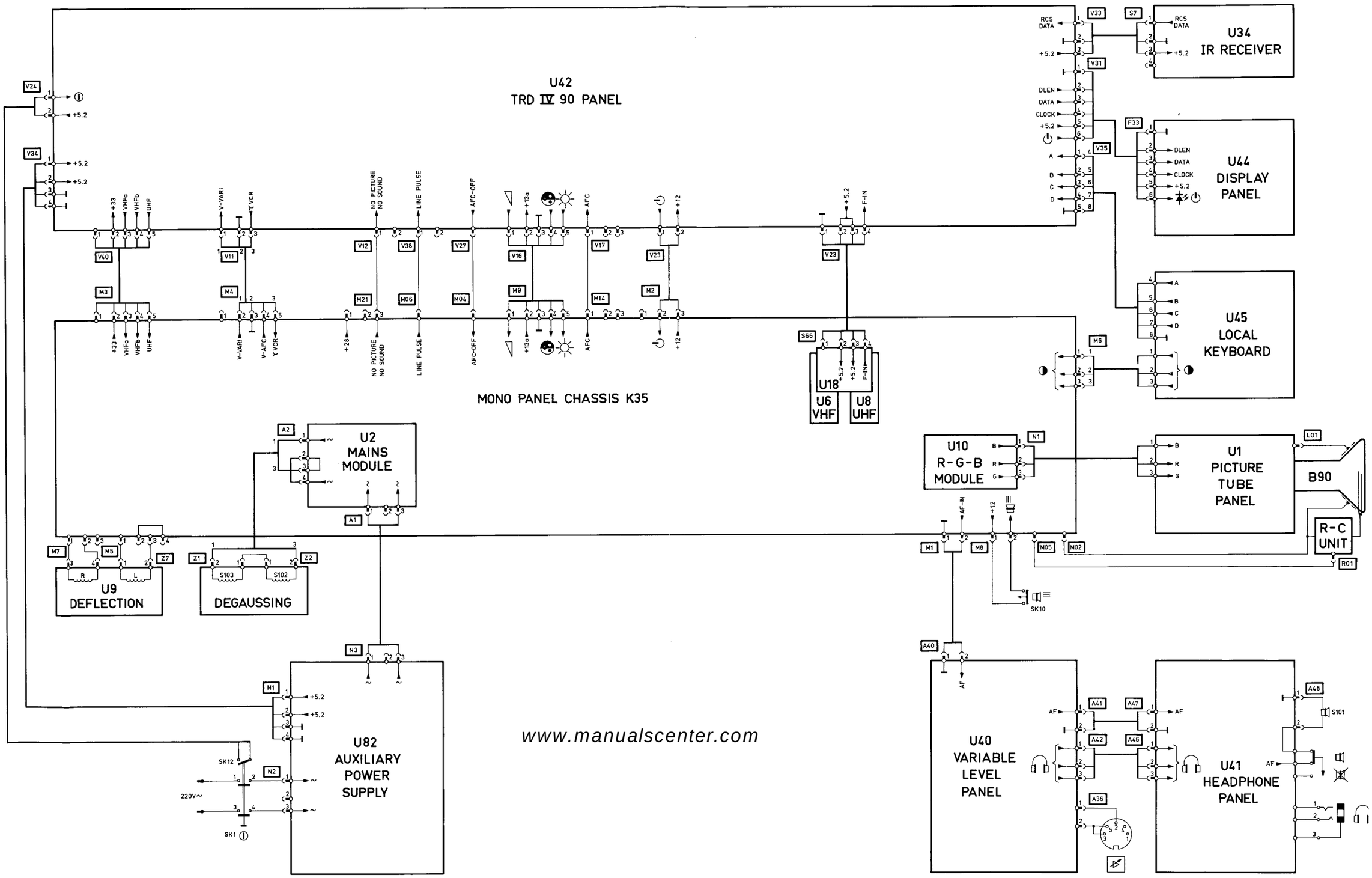
CS 79 512



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28 543 E

U42 TRD IV-90 PANEL

IC20	UPD8049C-163	4822 209 10171
IC93	SAB3034	4822 209 10169
IC99	TL061GCP-00	4822 209 80963
BA220		4822 130 34221
BA221		4822 130 30831
BA317		4822 130 30847
BAS11		4822 130 41273
BC547A		4822 130 41019
BC548		4822 130 40938
BC548A		4822 130 40948
BC548B		4822 130 40937
BC548C		4822 130 44196
BC557		4822 130 44256
BC558		4822 130 40941
BC558C		4822 130 44197
BZX79/B5V6		4822 130 34173
BZX79/B6V2		4822 130 34167
BZX79/B6V8		4822 130 34278
BZX79/B22		4822 130 34441
BAV21		4822 130 30842
R35	560 Ω - 1.6 W	4822 116 51106
R114	10 kΩ - 0.4 W	4822 116 51253
R115	2.2 kΩ - 0.4 W	4822 116 51245
R117	39 kΩ - 0.4 W	4822 116 51262
S21		4822 157 50943
S113		4822 157 50943
S134		4822 157 50943
U4		4822 212 21227
U5		4822 212 21228
U15		4822 212 21226
KT1	6 MHz	5322 242 74364

U44 DISPLAY PANEL 4822 212 21256

U1	4822 212 21256
CQW10	4822 130 31512

U45 LOCAL KEYBOARD 4822 276 80238

1N4148		4822 130 30621
R26	22 kΩ	5322 100 10118
Switch	(8x)	4822 276 10799

U82 AUX. SUPPLY 4822 212 21255

IC5	L7805CV	4822 209 80817
1N4003GP		4822 130 31545
VL1	T1A	4822 253 30021
R2	100 Ω	4822 100 10075
T1		4822 145 30253

-VARIOUS-

S101	AD44901/M15	4822 240 40137
U2	Mains module	4822 212 20649
U3	Coax assy	4822 267 10089
U5	IF module	4822 212 21309
U6	Channel selector V317LO (10Z)	4822 210 40191
U6	Channel selector V334LO (00Z/01Z/02Z/42Z)	4822 210 40192
U8	Channel selector U324LO	4822 210 50093
U9	Chrom./luminance module	4822 212 21126
U10	R.G.B. module	4822 212 20616
U11	Supply driver module	4822 212 21114
U12	Sync. module	4822 212 21164
U18	Prescaler module	4822 212 21286
U34	IR-receiver	4822 212 21336
U47	Adapter panel	4822 212 21192
U101	PAL/SECAM module	4822 212 20694
U430	Y-automatic PAL/SECAM	4822 212 20695

U7 SOUND OUTPUT STAGE 4822 212 21251

IC161	TBA120S	5322 209 84511
IC162	TDA1512	4822 209 81201
BAW62		4822 130 30613
BZX79/C12		4822 130 34197
BC548		4822 130 40938
R163	4.7 kΩ	4822 100 10363
R178	330 Ω	5322 116 55026
C166	330 pF	5322 121 54077
S161		4822 156 20726
S162		4822 156 20727
S166		4822 158 10475

U40 VARIABLE PANEL 4822 212 21418

T1	4822 140 60233

U41 HEADPHONE PANEL 4822 212 21257

Headphone socket with switch	4822 267 10093

-MISCELLANEOUS-

2p	4822 265 20172
3p	4822 265 30121
4p	4822 265 30119
5p	4822 267 40247
6p	4822 265 30117
7p	4822 265 40119
1p	4822 266 20063
2p	4822 266 20073
3p	4822 266 30071
4p	4822 266 30072
5p	4822 266 30075
6p	4822 266 30073
7p	4822 266 40057

IC

8p	4822 255 40164
14p	4822 255 40136
16p	5322 255 44185
18p	4822 255 40239
24p	4822 267 70094
28p	5322 255 44047
40p	4822 255 40129

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DIAGRAM-SCHALTBILD-SCHEMA A

CHANNEL SELECTOR
KANALWÄHLER
SELETTORE CANALE

IF AMPL + DET + AGC
ZF VERST + DEM + AVR
AMPL FI + RIVEL + CAG

CHROMINANCE + LUMINANCE
FARBART + LEUCHTDICHTE
CROMINANZA + LUMINANZA

SYNCHRONISATION
SINCRONIZZAZIONE

SUPPLY
SPEISUNG
ALIMENTAZIONE

VERTICAL
VERTIKAL
VERTICALE

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CHROMINANCE • LUMINANCE
FARBART • LEUCHTDICHTE
CROMINANZA • LUMINANZA

R-G-B AMPLIFIER
R-G-B VERSTARKER
AMPLIFICATORE R-V-B

SUPPLY
SPEISUNG
ALIMENTAZIONE

HORIZONTAL
ORIZZONTALE

EAST - WEST
OST - WEST
EST - OVEST

VERTICAL
VERTIKAL
VERTICALE

SEE SERVICE NOTES
VEDERE NOTE SU DOCUMENTAZIONE

K35

27 194F12

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DIAGRAM-SCHALTBILD-SCHEMA B

U80 IR TRANSMITTER
TRANSMETTORE TELECOMANDO

U34 IR RECEIVER
RICEVITORE TELECOMANDO

U45

U42

U82

U44

U15

U4

U1

IC20 UPD8050C-163

INPUT CONTROL

INGRESSO REGOLAZIONE

SYSTEM CONTROL SELETTORE SISTEMA

PR. "0" LATCH

CHANNEL CONTROL

CONTROLLO DI CANALI

MODE TEST

BAND SELECTION

SELETTORE DI BANDA

DATA PROCESSOR

PROCESSORE DATI

POWER ON RESET

RESET ALL' ACCENSIONE

VOLTAGE DETECTOR

RIVELATORE DI STATO

STATUS DETECTOR

RIVELATORE DI TENSIONE

TRANSMITTER INDENT

TRANSMET.

MEMORY CONTROL

MEMORIA DI REGOLAZIONE

AFC CONTROL

CONTROLLO CAF

G 6MHz

A&T CLOCK

D-BUS RECEIVER

RECIVITORE D-BUS

REFERENCE COUNTER CONTATORE DI RIFERMENTO

G 400kHz

DATA BUFFER DEI DATI

FREQUENCY BUFFER DI FREQUENZA

FREQUENCY COUNTER CONTATORE DI FREQUENZA

TUNING CONTROL CONTATORE DI SINTONIA

CLOCK SWITCH COMMUTATORE DI CLOCK

ANALOGUE CONTROL CONTROLLO ANALOGICO

ANALOGUE REGISTER REGISTRO ANALOGICO

IC93 SAB3034

ADDRESS DECODER

DECOD. INDIRIZZI

SELECTOR DECOD. DI SELEZIONE

READ WRITE ERASE

MEMORY 100 × 14 BITS

MEMORIA 100 × 14 BITS

DATA REGISTER

REGISTRO DATI

SEPARATORE I/O BUFFER

CLOCK OSCILLATOR

OSCILLATORE DI CLOCK

DECODER + DISPLAY DRIVER

DECODIFICATORE + PILOTA DISPLAY

STATUS STATO

AGC-OFF

AFC-ON

AFC ON

SILT

DATA

CLOCK

DLEN

DLIM

FIN

Fup

Fdown

* OPTIONAL

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IC20 UPD8050C-163

INPUT CONTROL

INGRESSO REGOLAZIONE

SYSTEM CONTROL SELETTORE SISTEMA

PR. "0" LATCH

CHANNEL CONTROL

CONTROLLO DI CANALI

MODE TEST

BAND SELECTION

SELETTORE DI BANDA

DATA PROCESSOR

PROCESSORE DATI

POWER ON RESET

RESET ALL' ACCENSIONE

VOLTAGE DETECTOR

RIVELATORE DI STATO

STATUS DETECTOR

RIVELATORE DI TENSIONE

TRANSMITTER INDENT

TRANSMET.

AFC CONTROL

CONTROLLO CAF

MEMORY CONTROL

MEMORIA DI REGOLAZIONE

U4

V_{UHF}

V_{VHFb}

V_{VHFa}

IC93 SAB3034

D-BUS RECEIVER

RECIVITORE D-BUS

DATA BUFFER DEI DATI

FREQUENCY BUFFER DI FREQUENZA

REFERENCE COUNTER CONTATORE DI RIFERMENTO

FREQUENCY COUNTER CONTATORE DI FREQUENZA

CLOCK SWITCH COMMUTATORE DI CLOCK

TUNING CONTROL CONTATORE DI SINTONIA

ANALOGUE CONTROL CONTROLLO ANALOGICO

ANALOGUE REGISTER REGISTRO ANALOGICO

U5

U15

ADDRESS DECODER

DECOD. INDIRIZZI

SELECTOR DECOD. DI SELEZIONE

DATA REGISTER REGISTRO DATI

CLOCK OSCILLATOR OSCILLATORE DI CLOCK

MEMORY 100 × 14 BITS MEMORIA 100 × 14 BITS

READ WRITE ERASE

SEPARATORE I/O BUFFER

U44

U1

DECODER + DISPLAY DRIVER

DECODIFICATORE + PILOTA DISPLAY

IC99 TL061GCP-00

AFC-ON Fup Fdown FIN

AFC ON

V27 AFC OFF

DATA CLOCK DLEN DLIM SILT DATA

RC-5 DATA

ACK

STATUS STATO

AGC-OFF

VCR (PROG. 0=12V)

I-II

12V-V_{UHF}

12V-$V_{VHF\,b}$

12V-$V_{VHF\,a}$

min.-1.7V max.-9.6V

min.-0.9V max.-3.4V

min.-1.3V max.-5V

min.-1.7V max.-9.6V

min.-1.7V max.-9.6V

2.3V 5.9V

5.2V 4V

19V 7V

AFC

V-Vari 0.5-28V

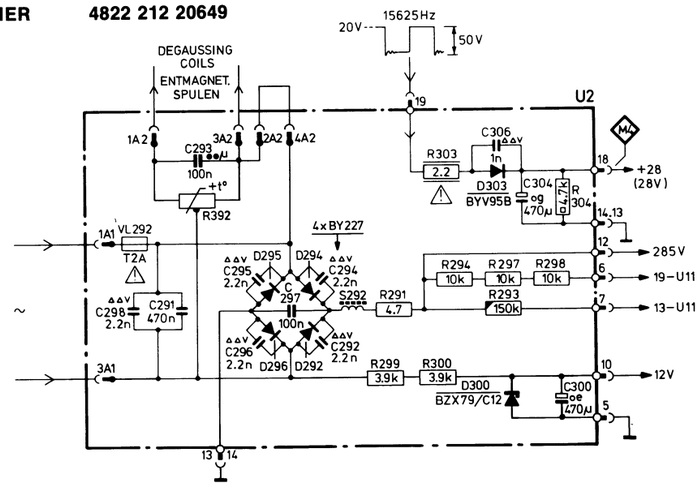
* OPTIONAL

A+C+D

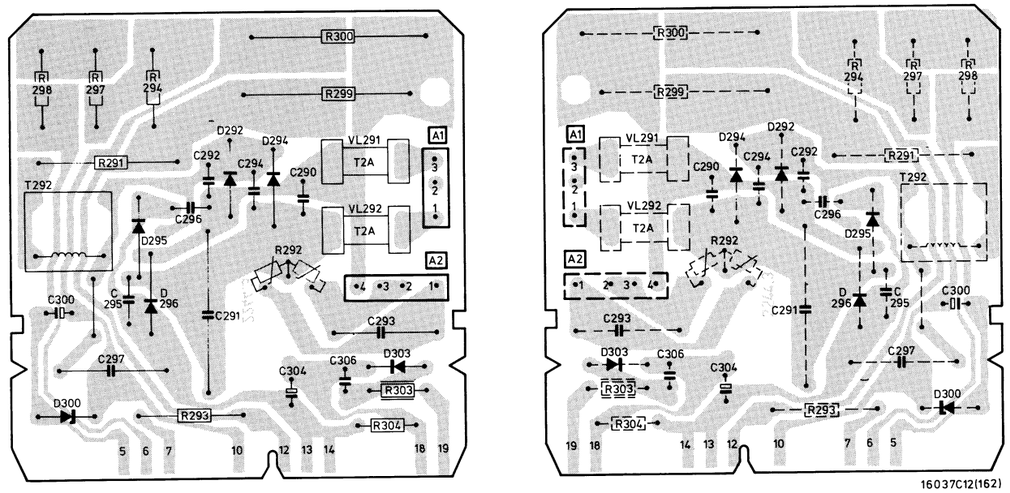
28 302 F12

CS 80 504

U2 MAINS RECTIFIER 4822 212 20649



28 558 B12

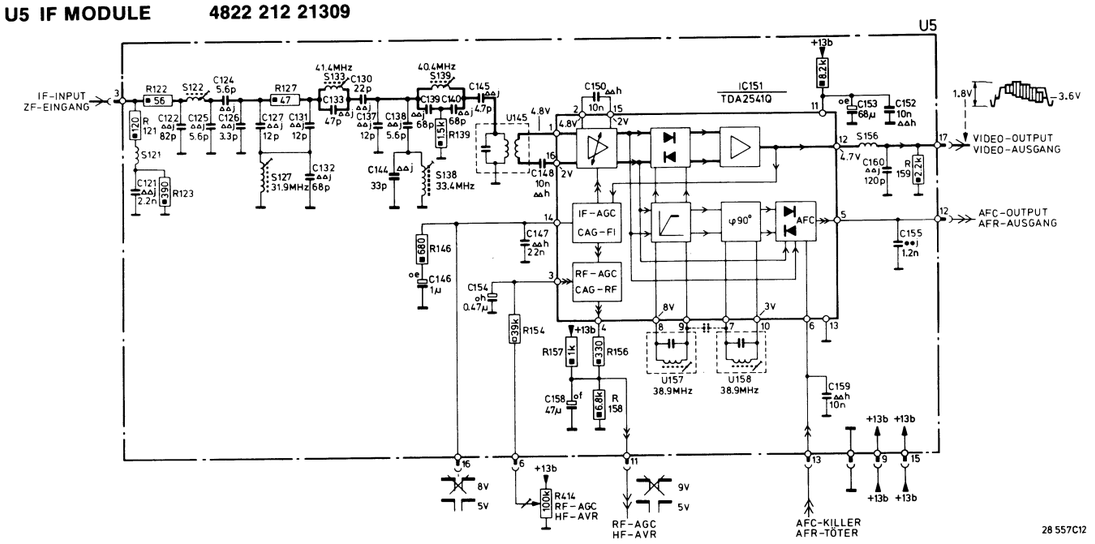


16037C12(162)

BY227		4822 130 34633
BYV95B		4822 130 41486
BZX79/C12		4822 130 34197
S292		4822 157 50772
3p		4822 265 30121
4p		4822 265 30119
VL291	T2A	4822 253 30025
VL292	T2A	4822 253 30025

C291	470 nF - 275 V	4822 121 40517
R303	2.2 Ω - 0.125 W	4822 111 30437
R291	4.7 Ω - 4 W	4822 113 80224
R292	PTC	4822 116 40025
R294	10 kΩ - 2.5 W	5322 116 54989
R297	10 kΩ - 2.5 W	5322 116 54989
R298	10 kΩ - 2.5 W	5322 116 54989
R299	3.9K - 0.5 W	4822 116 51153
R300	3.9K - 0.5 W	4822 116 51153

U5 IF MODULE 4822 212 21309



28 557C12

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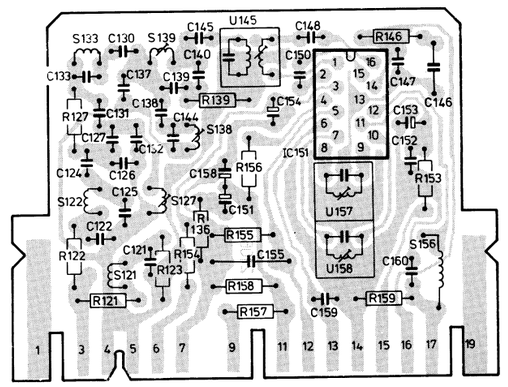
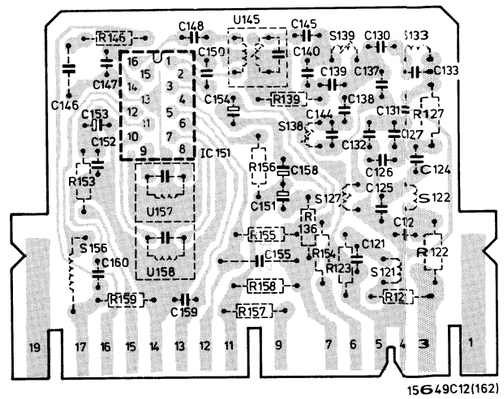


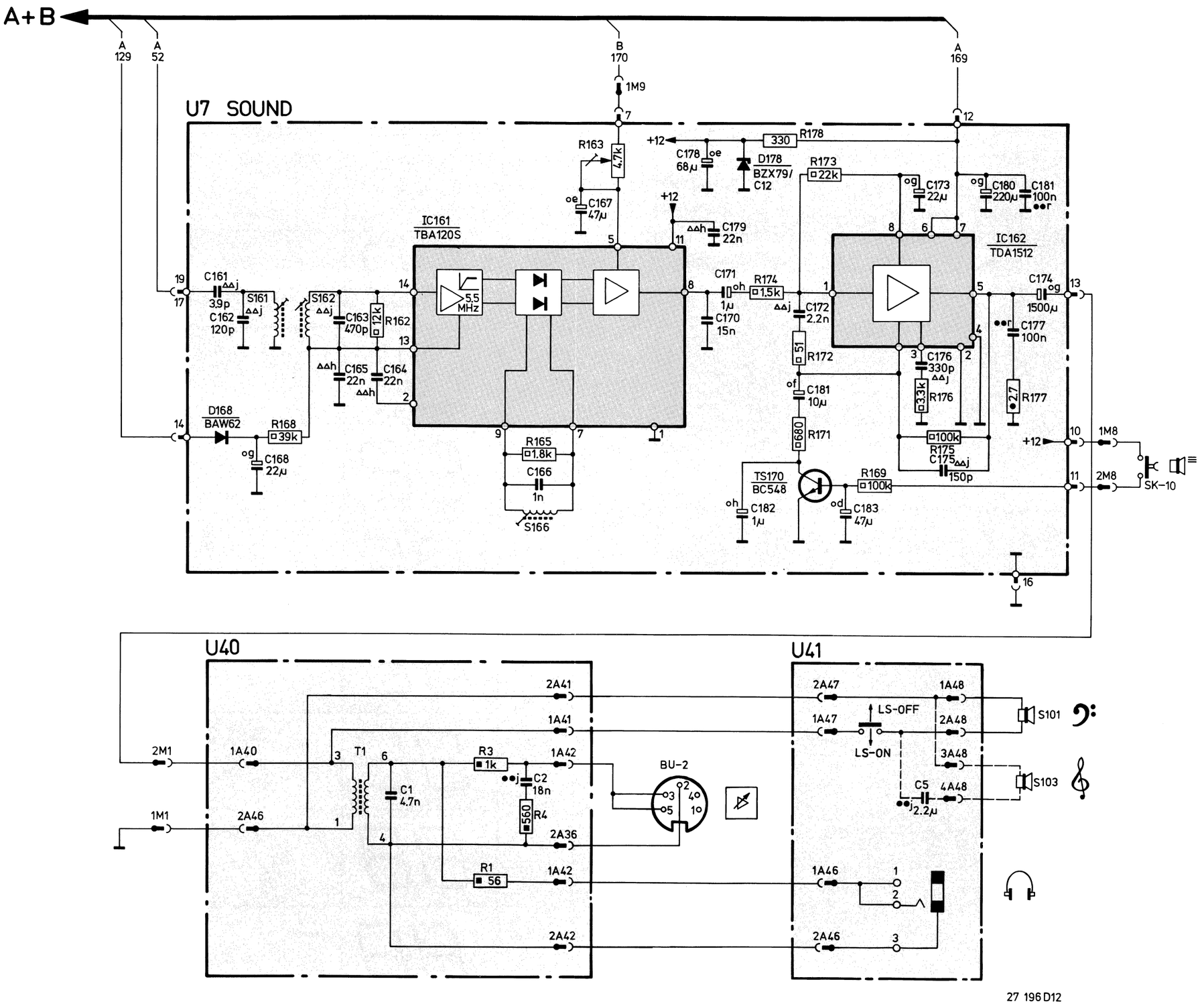


1564 9C12(162)

TDA2541Q		4822 209 80481
C121	2.2 nF - 63 V	4822 121 50415
C147	22 nF - 63 V	4822 122 30103
C148	10 nF - 63 V	4822 122 30043
C150	10 nF - 63 V	4822 122 30043
C152	10 nF - 63 V	4822 122 30043
C159	10 nF - 63 V	4822 122 30043

S121	4822 156 20812
S122	4822 156 20793
S127	4822 156 20795
S133	4822 156 20794
S138	4822 156 20796
S139	4822 156 20797
U145	4822 156 20798
S156	4822 158 10082
U157	4822 156 20799
U158	4822 156 20801

CS 80 507



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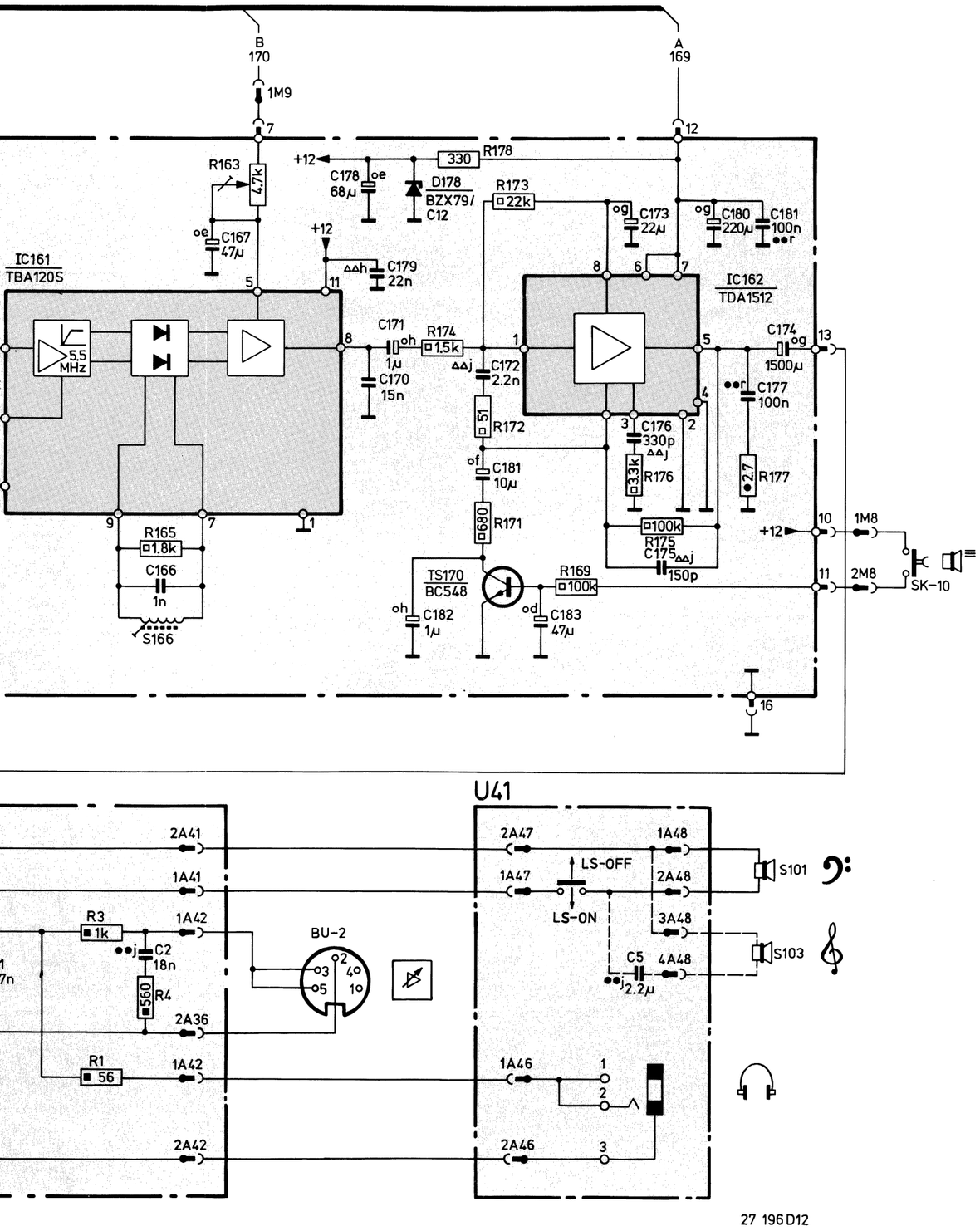
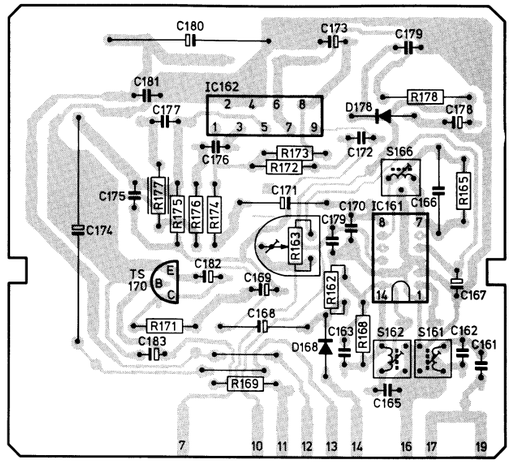
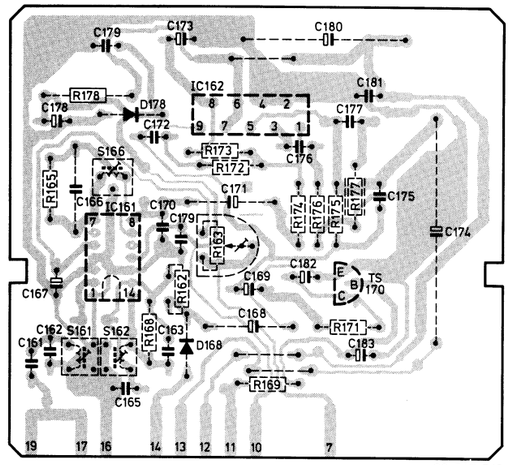


U7 SOUND OUTPUT STAGE





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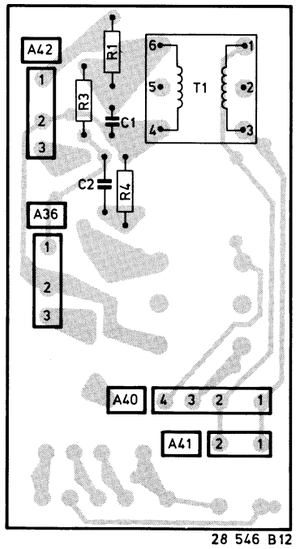
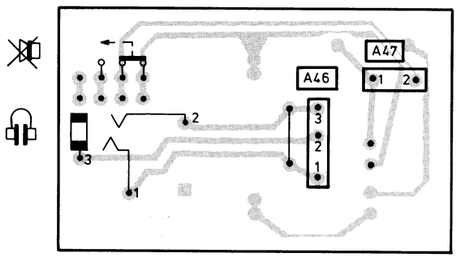
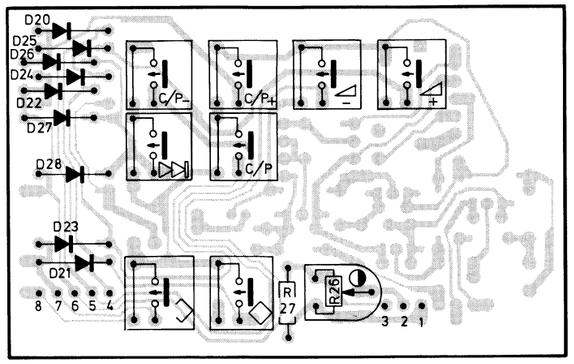
U40 VARIABLE LEVEL PANEL



U41 HEADPHONE PANEL

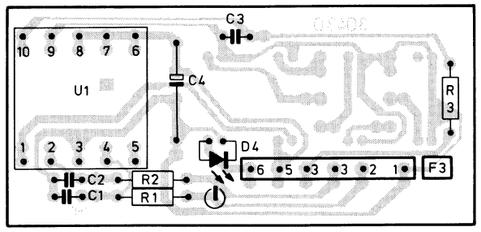


U45 LOCAL KEYBOARD



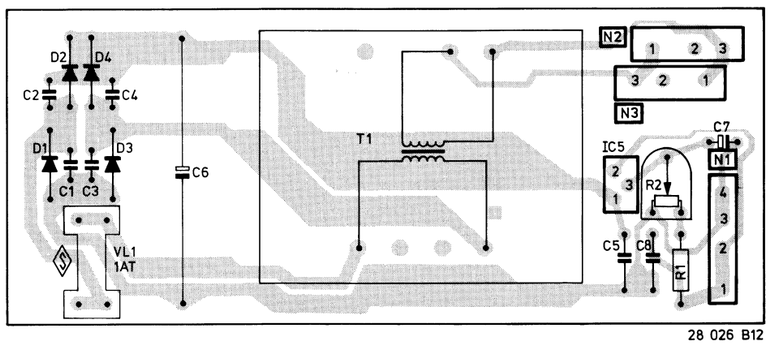
28409A2

U44 DISPLAY PANEL



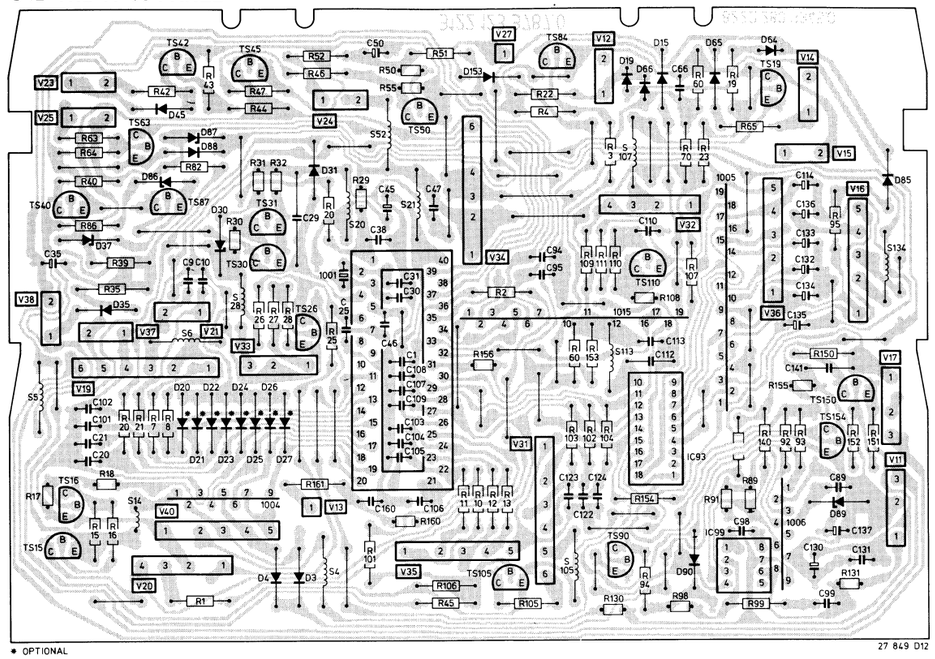
28410A2

U88 AUX. POWER SUPPLY



28 026 B12

U42 TRD IV-90 PANEL



• OPTIONAL

27 849 D12

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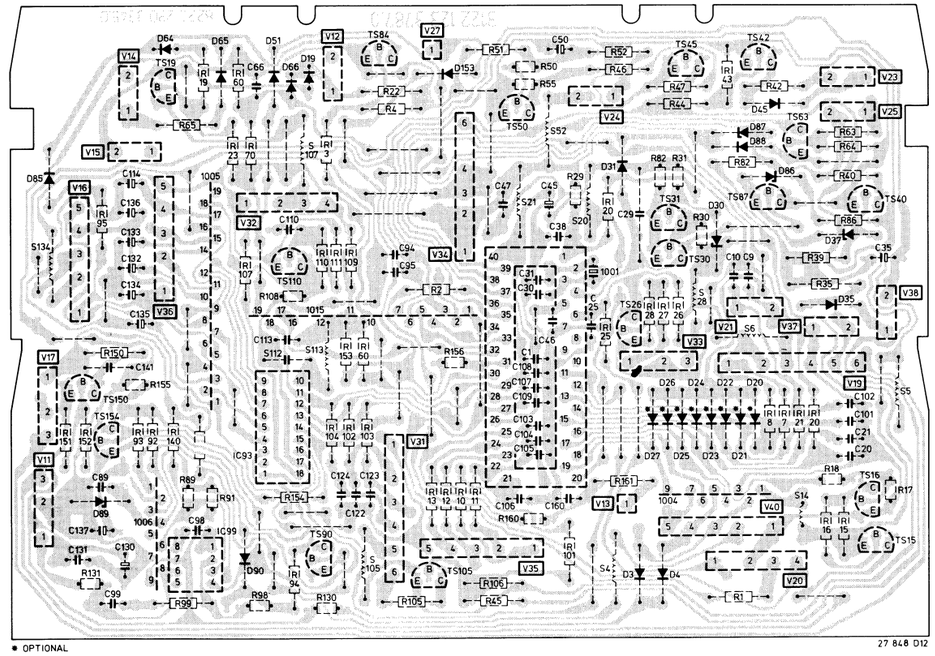


• OPTIONAL

27 848 D12

*

D20 – S-CHANNELS

D21 – ONLY UHF

D22 – I-CHANNELS

D23 – ONE DIGIT ENTRY

*

D24 – ☰

D25 – ⌒

D26 – TRANSMITTER IDENTIFICATION

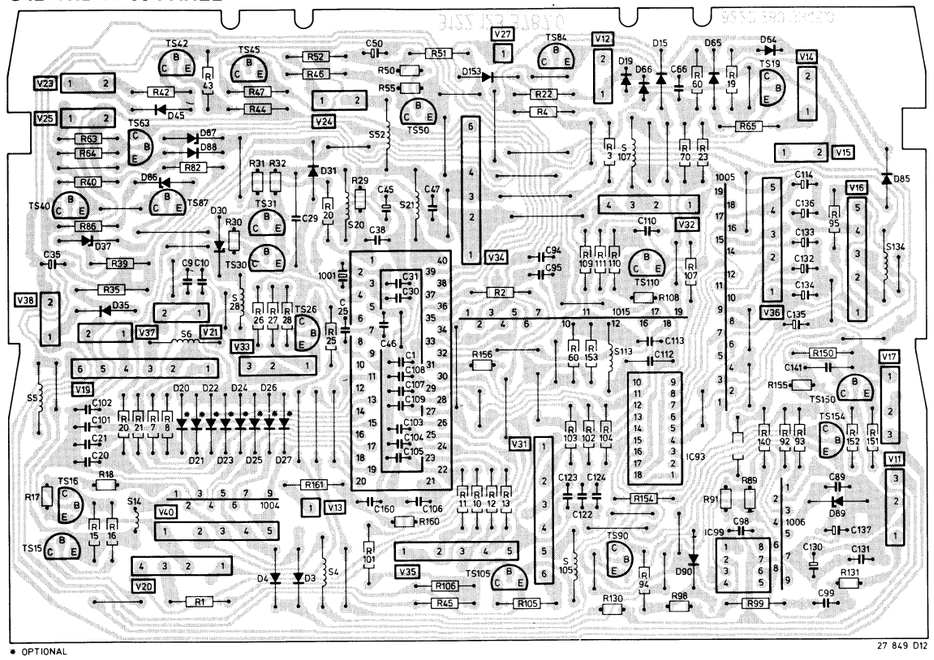
D27 – START SEARCH f_N

QUICK D

INDICATION ON DISPLAY

AUF ANZEIGE

U42 TRD IV-90 PANEL



• OPTIONAL

27 849 D12

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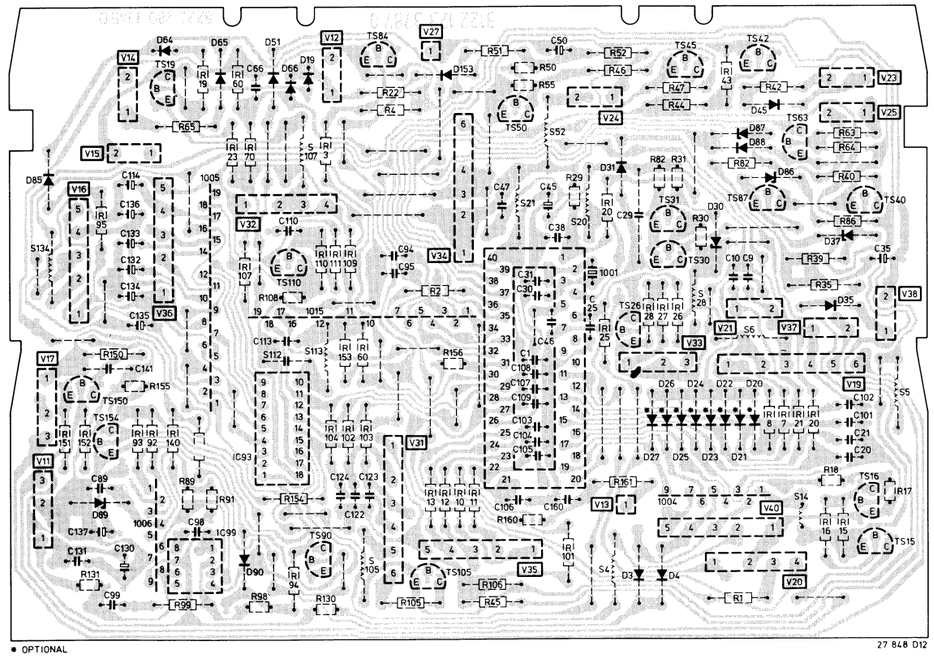

• OPTIONAL

27 848 D12

*

D20 – S-CHANNELS

D21 – ONLY UHF

D22 – I-CHANNELS

D23 – ONE DIGIT ENTRY

*

D24 –

D25 –

D26 – TRANSMITTER IDENTIFICATION

D27 – START SEARCH f_N

QUICK DIAGNOSIS TABLE TRDIV

INDICATION ON DISPLAY AUF ANZEIGE	INCORRECT FUNCTIONING UNRICHTIGES FUNKTIONIEREN	CORRECT FUNCTIONING RICHTIGES FUNKTIONIEREN	POSSIBLE DEFECTIVE COMPONENT EVENTUELLE SCHADHAFTE KOMPONENTE
			RC TRANSMITTER FERNBEDIENUNGSSENDER RC RECEIVER FERNBEDIENUNGS-EMPFÄNGER TS26,TS105,IC20
E0			U15, IC20
E1			TS39,TS40,TS170 D35,D37,D39,D170,D171
E2			U34,TS26
88 NOT O.K			IC20
88 NOT O.K			U32
88 O.K			U5
88 O.K			IC93
88 O.K			IC99,TS90,U4

24 904 C12/A